Staff person handling: Jim Lynch, Director

Date/location: June 29, 2006 in Red Lodge, MT

Item: Approve minutes

## Background

Staff presents the following minutes for review and approval:

- April 5, 2006 teleconference
- April 10, 2006 teleconference
- April 13, 2006 meeting
- May 4, 2006 teleconference
- May 8, 2006 teleconference
- May 25, 2006 meeting
- June 5, 2006 teleconference

Notes/discussion

Staff person handling: Jim Lynch, Director

Date/location: June 29 in Red Lodge, MT

Item: CTEP projects on MDT right-of-way

Sidewalks-Columbus

River Trail System-Deer Lodge

### Background

The Commission approves Community Transportation Enhancement Program (CTEP) projects that are located on or adjacent to state designated streets and roads.

The following CTEP projects are funded with the enhancement set-aside of the Surface Transportation Program that is allocated by population to Montana local and tribal governments. The communities select projects for funding with their allocations and provide required non-federal match. The program is based on an agreement between MDT and Montana local and tribal governments. Projects proposed for addition to the program are shown below:

#### 1. Sidewalks - Columbus

This enhancement project will design and construct approximately 440 linear feet of 10-foot wide concrete sidewalk. The sidewalk will begin at reference point 46.578 on Highway 78 (Primary-78) in the west side right-of-way, travel north for 285 feet and turn left onto the south side right-of-way of Clough Avenue for 155 feet.

The existing sidewalk is situated in a low area and subject to flooding during rainstorms and snow melt, which forces pedestrian traffic onto the shoulder of Highway 78 and Clough Avenue. This project will provide a safe walkway for pedestrians along Highway 78 and Clough Avenue by replacing the existing deteriorated sidewalk.

The estimated total costs are \$23,702 consisting of \$500 for preliminary engineering, \$4,240 for construction engineering and \$18,962 for construction. Including this project, Stillwater County will have obligated \$382,552 of the \$434,157 made available through the CTEP program.

## 2. River Trail System - Deer Lodge

This enhancement project will design and construct approximately 13,700 linear feet of 10-foot wide paved path. The path will tie into the existing Arrowstone Park trail system and include the installation of an historic truss pedestrian bridge, adopted by the Museum and Arts Foundation, across the Clark Fork River. Other work will include signage, sidewalk and existing trail reconstruction to meet handicap accessibility standards, and interpretive kiosks and traffic control.

The project will provide a safe route for bicycles and pedestrians from residential areas to community recreational opportunities, historic sites and commercial areas.

The path begins where S-275 connects with the North Deer Lodge Interchange and travels west and then south along Main Street (S-275) for approximately one mile. The path continues on a westerly direction passing through the City Park to the Clark Fork River; and then follows the river to just beyond the bridge on Main Street, south of town. The project will be sited on MDT right-of-way, Powell County and city of Deer Lodge property. In addition, easements may be purchased from the BNSF, and donated by the National Park Service and the Museum and Arts Foundation for the project. The preliminary planning and design engineering will involve determining easement and/or right-of-way needs.

The project currently includes funding from CTEP, Fish Wildlife and Parks, Atlantic Richfield Corporation (ARCO) and the US Forest Service. To complete the funding package additional grant funds and local contributions will be raised prior to construction. To date, \$86,000 has been requested from CTEP.

The project's estimated total costs are \$1,035,000 consisting of \$90,000 for preliminary engineering, \$45,000 for construction engineering and \$900,000 for construction.

Including this project, Powell County will have obligated \$191,504 of the \$232,953 made available through the CTEP program.

### **Summary**

All work will be in accordance with current design standards and ADA requirements.

#### Staff recommendations

Staff recommends that the commission approve the addition of these projects to the program.

Notes/discussion

Staff person handling: Loran Frazier

Date/location: June 29, 2006 in Red Lodge, MT

Item: Access Control Exceptions Committee - roles and responsibilities

NH 0002(418) US 93 Corridor Preservation (Evaro to Polson)

### Background

This item was tabled at the may 25, 2006 meeting at Commissioner Howlett's request, to ensure tribal concurrence and to obtain their written support.

This item was raised at the May 31, 2006 Policy Oversight Group (POG) meeting, and and the tribe confirmed their concurrence with the concept and associated procedures (see attached e-mail from Tribal Attorney Joe Hovenkotter).

The roles and responsibilities document (see attached) includes a new requirement that MDT deliver a status briefing regarding US 93 access permit requests at each future POG meeting.

### History

Through the environmental process and the negotiation of the Memorandum of Agreement (MOA), it was decided that this project should include access control.

To that end, the Commission designated this portion of Highway 93 as a controlled access highway and facility by executing an access control resolution on June 29, 1999. An access control plan consisting of an access classification plan and access control reports were then developed for this corridor. The Policy Oversight Group (POG) was tasked with the responsibility of overseeing the Access Control Plan and they in turn established an exceptions committee to review landowner requests for exceptions to the plan. Roles and responsibilities were established for the committee as well as an appeals process.

In 2004, the department negotiated a Memorandum of Understanding (MOU) with the Confederated Salish and Kootenai Tribes (CSKT). One of the items negotiated in the MOU was the establishment of an access committee to review landowner requests for access within the reservation and on MDT routes. The access review process included a provision for appeals. An appeal process was created to incorporate the Technical Design Committee (TDC) and the POG. This allowed for continued tribal input during the appeals process. A final appeal could go before the Transportation Commission.

After the MOU was negotiated, it was decided to consider modifying the Access Control Exceptions Committee roles and responsibilities to include the appeals process outlined within the MOU. The modified roles and responsibilities were presented to the Technical Design Committee on December 8, 2005. They approved the plan. The roles and responsibilities was

then presented to the Policy Oversight Group at their February 22, 2006 meeting. They approved the plan.

## **Summary**

The roles and responsibilities of the Exceptions Committee are being submitted to the Transportation Commission for consideration and approval of the **appeals process** outlined therein.

## Staff recommendations

Staff recommends approving the appeals process.

Notes/discussion

## NH 0002 (418) 1744-418 US 93 Corridor Preservation (Evaro to Polson) Access Management Plan\*



# Exceptions Committee Roles & Responsibilities Summary

The US 93 Corridor Preservation Access Management Plan Exceptions Committee will be composed of technically qualified representatives with authority to act on behalf of the entity represented. The following are the entities to be represented:

- 1. **Montana Department of Transportation** (one voting representative, the District Traffic Engineer; the committee chair is the Right-of-Way Bureau Access Management Manager)
- 2. Confederated Salish & Kootenai Tribes (one voting representative)
- 3. Federal Highway Administration (one voting representative)
- 4. Lake County (one voting representative when appropriate)
- 5. Missoula County (one voting representative when appropriate)
- 6. City of Polson (one voting representative when appropriate)
- 7. **City of Ronan** (one voting representative when appropriate)
- 8. **City of St. Ignatius** (one voting representative when appropriate)

"When appropriate" refers to County and City representatives acting only on decisions within their jurisdictional boundaries. Each entity shall indicate their voting representative by name at the beginning of each meeting. No meeting attendee shall vote unless designated an entity's official representative at the commencement of that day's meeting.

## The Exceptions Committee Purpose

The Exceptions Committee is a structured, long-term Committee to hear and review access requests from landowners that are exceptions to the US 93 Access Management Plan. The Access Management Plan for *US 93 Evaro – Polson* was endorsed by the Transportation Commission. This Exceptions Committee remains in existence until the Transportation Commission approves the Final Access Management Plan. Any deviation from the Access Management Plan must be referred to the Exceptions Committee. All access points approved by the Access Management Plan or by the Exceptions Committee will be legal accesses and will be shown on the right-of-way plans for the US 93 Corridor Preservation project. Access points not shown on said right-of-way plans shall be considered illegal and shall be closed.

#### The Exceptions Committee Procedures

• Review shall be on a parcel-by-parcel, case-by-case basis.

<sup>\*</sup> Note: References to Access Management Plan, Access Control Plan, and Access Classification Plan mean the same thing.

- An access request must be presented to the Exceptions Committee as a whole rather than to individual members.
- Access requests are placed on the Committee's agenda by the Right-of-Way Bureau Access Management Manager upon receiving the request from the Landowner, Landowner's Agent or Right-of-Way Acquisition Agent.
- Exceptions Committee meetings shall regularly occur the last Thursday of each month, unless the Right-of-Way Bureau Access Management Manager determines there are no agenda items, or unless the date is a state or federal holiday. The scheduled meeting time may be changed by the Right-of-Way Bureau Access Management Manager for sufficient reason and upon notice to all parties who will present an agenda item. Meetings shall be held at the MDT Missoula District Office in Missoula, Montana. All meetings are open to the public.
- All records of Exceptions Committee meetings, including agendas, notes, and final minutes
  recording Committee decisions shall be kept by the Right-of-Way Bureau Access Management
  Manager, or designee. All permanent records shall be physically kept at the MDT Helena Rightof-Way Bureau.
- Access requests may be presented to the Committee by the landowner personally, or by the
  landowner's representative, or by the Right-of-Way Acquisition Agent, at the landowner's option.
  All presentations by anyone shall be complete, and include all possible access options, stationing,
  maps, plans, approach classifications requested, etc. No second appearances to consider additional
  information shall be allowed unless specifically directed by the Committee at the time of the initial
  request appearance.
- The Exceptions Committee makes the decision at their meeting of all appropriate representatives. No decisions shall be made by individual communication outside the regularly scheduled meeting.
- If the designated representative is unable to attend a meeting, the entity a previously-designated representative may designate an alternate to attend the meeting and vote on the entity's behalf.
- Decisions shall be made by majority vote of the representatives present, including votes from entities appropriately voting on issues within their jurisdictional boundaries. "Majority" means a simple majority of appropriate voting members present.
- Meetings shall be open to the landowner, landowner's representatives, and any other interested individuals. The Committee shall hold discussions and votes in an open forum.
- The Right-of-Way Bureau Access Management Manager will prepare a summary detailing all requests and decisions made by the Exceptions Committee since the last POG meeting to be presented to POG at the next POG meeting.
- Once notified of the Committee's decision, the landowner may appeal an Exceptions Committee
  decision to the Technical Design Committee (TDC) within 10 days of notification. The appeal
  request must be in writing, and should include a brief statement of the landowner's position. The
  appeal process shall be explained to each landowner in advance of the Exceptions Committee
  deliberations.
- The TDC may either vote on the landowner's access request via its own meeting procedures, or may choose to refer the issue to the Program Oversight Group (POG) for their consideration and action. Only issues or requests of project significance, or which may affect other parcels may be referred by TDC to POG. If a matter is referred, no action shall be taken nor voted upon by TDC.
- The landowner may appeal a TDC or POG decision to the Montana Transportation Commission.

### The Appeals Process

All landowners shall be informed of the Exceptions Committee and appeal process as soon as an access issue is identified by the Right-of-Way Acquisition Agent, or Right-of-Way Bureau Access Management Manager. The landowner's cost for the appeals process shall be at landowner's expense.

- Step 1: Landowner communicates concerns to MDT's Acquisition Agent or Right-of-Way Bureau Access Management Manager.
- Step 2: Landowner or Right-of-Way Acquisition Agent forwards access request to the Right-of-Way Bureau Access Management Manager to be placed on the next Exceptions Committee agenda. Access Management Manager places request on the Committee's agenda and ensures that landowner is notified of where and when the meeting will take place.
- Step 3: Landowner, landowner's representative, or Acquisition Agent appears at Exceptions Committee meeting with full presentation of all access requests, including type of access, classification, stationing, other options for access, etc.
- Step 4: Upon notification of an adverse decision, Landowner may appeal Exceptions Committee decision to TDC, in writing, within 10 days of notification of decision. TDC will consider the appeal through its regular agenda and decision-making procedures. Landowner will be notified of a TDC decision.
- Step 5: TDC may take no action on a significant-impact or other appropriate issue or access request, and instead refer the matter to the POG. Landowner will be notified if this referral occurs.
- Step 6: POG will consider the matter through its regular agenda and decision-making procedures. Landowner will be notified of a POG decision.
- Step 7: Upon notification of an adverse decision, Landowner may appeal the decision to the Montana Transportation Commission, by requesting the item on the Commission's agenda for its next meeting, through the usual MDT process for agenda items. The Transportation Commission shall render its decision, which may include upholding the TDC or POG decision without comment. Landowner will be notified of the decision.
- Step 8: Landowner may choose to appeal the Transportation Commission decision through the Montana District Court.

#### Classification of an access

Master Plan Access Classifications are:

- Field / Farm
- Residential
- Commercial
- Public

Staff person handling: Loran Frazier, Chief Engineer

Date/location: June 29, 2006 in Red Lodge, MT

Item: Speed limit studies

## Background

Staff has conducted speed limit studies on the following routes:

- a. MT 39 Colstrip North (Rosebud County)
- b. US 12 MacDonald Pass (Lewis & Clark County)
- c. MT 38 Skalkaho Road (Ravalli County)

## **Summary**

The appropriate local government supports the special speed zone recommendations (see attached correspondence behind each speed limit report.)

#### Staff recommendations

Staff recommends the commission approve the special speed zones as presented.

Notes/discussion



## Montana Department of Transportation PO Box 201001 Helena, MT 59620-1001

#### Memorandum

To: Loran Frazier, P.E. – Chief Engineer

Highways and Engineering Division

From: Duane E. Williams, P.E.

Traffic and Safety Engineer

Date: June 6, 2006

Subject: MT 39 – Colstrip North

Speed Limit Investigation & Recommendations

- Rosebud County and the City of Colstrip submitted a request to extend the existing 55 mph speed limit north to the intersection with Pine Butte Road. The 55 mph speed zone was implemented in 2001 and encompasses all nearby development located along MT 39 north of Colstrip. The intersection with Pine Butte Road is located in a rural environment. Pine Butte Road is of significant importance to the community, as it is the primary access to the high school.
- □ The study area was reconstructed under project CT 39-1(11) in 1982. The typical section consists of two 12-foot travel lanes and 7-foot shoulders in each direction with auxiliary lanes at the intersection with Pine Butte Road. The average annual daily traffic volume is 2245. There were four accidents reported within the study area. The accident rate is 0.74 accidents per million vehicle miles traveled. This is below the statewide average.
- □ From the results of our engineering investigation we concluded that changing the existing 55 mph speed limit to 60 mph and extend the zone north to encompass the intersection with Pine Butte Road would best mirror traffic operation. Therefore, a 60 mph speed limit recommendation was proposed and presented to local officials and law enforcement. Local officials opposed the 60 mph speed limit option. Rosebud County, City of Colstrip, Colstrip School Superintendent and the Chief of Police all sent letters requesting a 55 mph speed limit. After reviewing all of the comments the Glendive District office also sent a letter in support of a 55 mph speed limit.
- Based on the level of support for a 55 mph speed limit, we have adjusted our original 60 mph recommendation to reflect the desires of the community. All comments are attached.
- □ A 55 mph speed limit beginning at station 120+00, project CT 39-1(11) (1,000 feet north of the intersection with Power Road) and continuing north to station 209+00 (250 feet north of the intersection with Pine Butte Road), an approximate distance of 1.7 miles.

## Original Report as Submitted to Rosebud County

At the request of both Rosebud County and the City of Colstrip a speed limit investigation was conducted on MT 39, Colstrip North. Local officials would like to extend the special speed limit configuration north to encompass the intersection with Pine Butte Road. The portion of MT 39 that passes through the City of Colstrip was last studied in 2001. From that investigation a new 55 mph speed zone was introduced and extended north to encompass all nearby development located north of the main body of the community.

The intersection with Pine Butte Road is located approximately 0.6-mile north of the 55 mph speed zone. This intersection is located in a rural environment with no adjacent development. MT 39 is a controlled access facility. Pine Butte Road is one of the few accesses off of MT 39. It is of significant importance to the community in that it also serves the high school.

The study area was reconstructed under project CT 39-1(11) in 1982. The typical section consists of two 12-foot travel lanes and 7-foot shoulders in each direction with additional roadway width at the Pine Butte Road intersection. There is a right-turn lane for northbound motorists and a left-turn bay for southbound motorists accessing Pine Butte Road. The roadway alignment is both straight and flat. Intersection and stopping sight distances are good. The average annual daily traffic volume is 2245.

### **Accident History**

The accident history was reviewed for a three-year period from October 1, 2001 to September 30, 2004. During this period there were four accidents reported within the study area. The accident rate is 0.74 accidents per million vehicle miles traveled. This is below the statewide average of 1.49 accidents per million vehicle miles traveled for state primary routes.

The accident experience consisted of a two intersection related multiple vehicle accidents and a single vehicle off-road accident within the existing 55 mph speed zone. The fourth accident was angle in type at the intersection with Pine Butte Road. Adverse roadway conditions were listed as a contributing factor in this accident. The accident involved a northbound motorist attempting a right turn onto Pine Butte Road, and making contact with a vehicle located on the side approach.

In comparison to statewide averages this segment of MT 39 is operating successfully with a good safety record.

### **Travel Speeds**

Vehicular travel speeds were sampled at seven locations beginning at the 45 mph to 55 mph transition and continuing north of the intersection with Pine Butte Road. The following table lists the 85<sup>th</sup> percentile speeds by location.

<b>Location</b>	85 <sup>th</sup> percentile Speed	Pace of Traffic Stream & Percent
45 mph to 55 mph	Northbound 56 mph	46 mph – 56 mph 67%
Transition	Southbound 56 mph	43 mph – 53 mph 61%

Milepost 24	Northbound 60 mph	<b>↑</b>	<del>49 m</del> ph – 59 mph 69%
(55 mph zone)	Southbound 59 mph		49 mph – 59 mph 66%
Milepost 24.4	Northbound 61 mph	: ا بو ا	52 mph – 62 mph 65%
(55 mph zone)	Southbound 59 mph	60 mph Trend in Pace	49 mph – 59 mph 65%
Near Childers	Northbound 62 mph	pr	52 mph – 62 mph 65%
Automotive (55 mph)	Southbound 59 mph	Tren	49 mph – 59 mph 68%
Milepost 25	Northbound 65 mph	qd   ;	52 mph – 62 mph 59%
(70 mph zone)	Southbound 66 mph	т 09	52 mph – 62 mph 49%
Milepost 25.2	Northbound 64 mph		52 mph – 62 mph 50%
(70 mph zone)	Southbound 69 mph	<u> </u>	49 mph – 59 mph 37%
North of	Northbound 66 mph		55 mph – 65 mph 57%
Pine Butte Dr.	Southbound 78 mph		70 mph – 80 mph 47%

The 85<sup>th</sup> percentile speeds and the upper limit of the pace are below the statutory 70 mph speed limit. The upper limit of the pace clearly supports a 60 mph speed limit for the entire segment from the end of the 45 mph speed zone to the intersection Pine Butte Road. The 85<sup>th</sup> percentile speeds north of the existing 55 mph speed zone are not as supportive for a 60 mph speed limit.

In addition to the differences in the travel speeds south of Pine Butte Road to those north of Pine Butte Road, there was also a significant change in the traffic volume observed. During this investigation the volume of traffic at station 5 south of Pine Butte Road was 1886. During the same time period the volume of traffic north of the intersection with Pine Butte Road was 900.

#### **Conclusions and Recommendations**

It is our conclusion that there is sufficient evidence to support a reduction in the statutory 70 mph speed limit south of Pine Butte Road. Both the pace of the traffic stream and the increase in traffic volume indicate that there is a change in roadway operation from that observed north of Pine Butte Road.

The speed statistics also indicate that the 55 mph speed limit is not fulfilling its intended purpose of accurately representing the 85<sup>th</sup> percentile speeds and the upper limit of the pace within its boundaries. Further extension of the 55 mph speed zone north to encompass the intersection with Pine Butte Road is not an option that can be supported by standard engineering practices. As mentioned earlier, back in 2001 the northern boundary of the 55 mph speed zone was structured to correspond with changes in the adjacent side culture. This resulted in some deviation from the speed profile.

At all three locations sampled within the 55 mph speed zone both the 85<sup>th</sup> percentile speeds and the upper limit of the pace clearly support a 60 mph speed limit. This 60 mph trend in the pace continues north to the intersection with Pine Butte Road. In recognition of this trend and the change in traffic patterns we recommend a reduction in the statutory 70 mph speed limit south of Pine Butte Road. For the southern portion of the study area we recommend increasing the 55 mph speed limit to 60 mph. This will result in a 45 mph to 60 mph speed limit transition on the north side of Colstrip.

In order to carry a proposal for a 60 mph speed limit to the Montana Transportation Commission we will need the written support of local officials to do so. An existing approved special speed limit cannot be increased without consent of local officials. In the event that local officials are opposed to the following 60 mph speed limit recommendation we will modify it to keep the 55 mph speed zone intact as approved in 2001 and recommend a 60 mph speed limit to Pine Butte Road. We encourage local officials to look closely at the consistency in the pace at each of the five locations sampled. The vast majority of motorists did not change their speed in relationship to the 15 mph change in the speed limit. Even through it is very common there is no requirement to maintain a 10 mph incremental change between speed limits. A second "Speed Reduction" warning sign will be installed for southbound motorists in advance of the 45 mph speed zone.

A 60 mph speed limit beginning at station 120+00, project CT 39-1(11) (1,000 feet north of the intersection with Power Road) and continuing north to station 209+00 (250 feet north of the intersection with Pine Butte Road), an approximate distance of 1.7 miles.

DCB:DRB:TRF:mt39colstriprpt

attachments

copies: D.E. Williams

D.R. Bailey



## Montana Department of Transportation PO Box 201001 Helena, MT 59620-1001

#### Memorandum

To: Loran Frazier, P.E. – Chief Engineer

Highways and Engineering Division

From: Duane E Williams, P.E.

Traffic and Safety Engineer

Date: June 6, 2006

Subject: US 12 – MacDonald Pass

Speed Limit Investigation & Recommendations

- □ Department maintenance personal have reported experiencing and observing more conflicts on MacDonald Pass in recent years. They voiced concerns about the statutory 70 mph speed limit being inappropriate for the terrain and the curvilinear nature of US 12. This study began near the intersection with Rimini Road and continued west approximately 11 miles to the end of the four-lane segment. The majority of this portion of US 12 is located in Helena National Forest. The typical section consists of two 12-foot travel lanes and 4-foot shoulders in each direction. The average annual daily traffic volume is 3,600.
- □ In a recent three year period there were 87 accidents reported on MacDonald Pass. The accident rate is above the statewide average at 2.57 accidents per million vehicle miles traveled. Seventy-one percent of the accidents occurred within a 5-mile segment on the east side of the study area.
- There was a reduction in the travel speeds identified that corresponded with the portion of the study area having the most restrictive roadway geometrics and experiencing the highest concentration of accidents. Based on geometrics associated with the terrain and their tendency to draw the travel speeds down, we recommend a reduction in the speed limit. The following proposed 60 mph speed limit was presented to Lewis & Clark County officials. They have responded that they concur with the following recommendation (comments attached).
- □ A 60 mph speed limit beginning at station 252+00, project FH 28-1(3), (just east of the Powell County Lewis & Clark County Line) and continuing east to station 476+00, project RF-FF 249(27), an approximate distance of 4.24 miles.

This investigation was conducted in response to an internal request from the Butte District office to evaluate the statutory 70 mph speed limit on the portion of US 12 that is known as MacDonald Pass. Maintenance personal have voiced a concern that the 70 mph speed limit may be contributing to the number of conflicts experienced on MacDonald Pass, particularly within the curvilinear segment on the east side. Maintenance staff has been involved in accidents while conducting daily operations, as well as encountering other situations that nearly resulted in an accident.

The study area was reconstructed under three different federal-aid projects between the years of 1973 and 1989, and more recently improved in 1997 and 2001. This portion of US 12 is a four-lane roadway consisting of two 12-foot travel lanes and 4-foot shoulders in each direction. The average annual daily traffic volume is 3,600. The majority of the study area is located within Helena National Forest. The terrain is mountainous as US 12 crosses the Continental Divide at an elevation of 6,325 feet. The east side of MacDonald Pass is heavily forested and nearly continuous in curvilinear character with numerous back to back horizontal curves and a switch back as the roadway follows the horizontal contours of the Continental Divide. Access to and from the roadway is limited to a few locations. The west side of the pass is much more open in character with fewer curves and longer tangent segments between curves.

#### **Accident History**

The accident history was reviewed for a three-year period from June 1, 2002 to May 31, 2005. During this period there were 87 accidents reported within the study area. The accident rate is 2.57 accidents per million vehicle miles traveled. The statewide average for rural NHS primary routes is 1.24 accidents per million vehicle miles traveled.

The accident experience consisted of 78 single vehicle accidents, four right angle accidents, four rearend accidents and one other multiple vehicle accident. Seventy-one percent (62 of 87) of the accidents occurred during daylight hours. Forty percent of the overall accident experience occurred on adverse roadway conditions and 21 percent of the accidents involved conflicts with animals.

There is an accident trend on the eastside of the MacDonald Pass involving eastbound motorists (descending) between milepost 27 and milepost 32. Seventy-one percent of the accidents reported occurred within this 5-mile segment or the equivalent to 45 percent of the study area. Seventy-four percent of those 62 accidents occurred in the eastbound direction. Forty-three percent of which had adverse roadway conditions listed as a contributing factor. This area also corresponds with where the vast majority of the animal related conflicts were reported.

### **Travel Speeds**

Vehicular travel speeds were sampled at 23 locations beginning near the two-lane to four-lane transition at milepost 23 and continuing east to milepost 34 pass just beyond the intersection with Rimini Road. The following table lists the speed statistics by location. The Continental Divide (MacDonald Pass) is located at milepost 27.6

Milepost	85 <sup>th</sup> % Speed	Pace of Traffic Stream	10-degree	Advisory
Location			Ball-Bank	Speed
MP 23.0	76 mph WB	(64 mph – 74 mph) 51%	NA	NA
	74 mph EB	(64 mph – 74 mph) 54%		
MP 23.6	75 mph WB	(64 mph – 74 mph) 51%	NA	NA

		1		1
	78 mph EB	(67 mph – 77 mph) 50%		
MP 24.0	74 mph WB	(61 mph – 71 mph) 48%	60 mph	None
	71 mph EB	(61 mph – 71 mph) 45%		
MP 24.5	73 mph WB	(61 mph – 71 mph) 49%	60 mph	None
	73 mph EB	(61 mph – 71 mph) 43%		
MP 25.0	73 mph WB	(61 mph – 71 mph) 50%	65 mph	None
	73 mph EB	(64 mph – 74 mph) 44%		
MP 25.6	73 mph WB	(61 mph – 71 mph) 43%	65 mph	None
	71 mph EB	(61 mph – 71 mph) 43%		
MP 26.0	71 mph WB	(58 mph – 68 mph) 49%	60 mph	None
	71 mph EB	(61 mph – 71 mph) 44%		
MP 26.5	72 mph WB	(61 mph – 71 mph) 49%	60 mph	55 mph WB
	71 mph EB	(58 mph – 68 mph) 41%		
MP 27.0	74 mph WB	(64 mph – 74 mph) 46%	NA	NA
	72 mph EB	(61 mph – 71 mph) 40%		
MP 27.6	71 mph WB	(58 mph – 68 mph) 43%	50 mph	50 mph WB
(Top of Pass)	71 mph EB	(61 mph – 71 mph) 43%		_
MP 28.0	68 mph WB	(55 mph – 65 mph) 44%	60 mph	None
(Frontier	65 mph EB	(55 mph – 65 mph) 45%		
Town)				
MP 28.5	72 mph WB	(61 mph – 71 mph) 39%	65 mph	None
	70 mph EB	(58 mph – 68 mph) 48%		
MP 29.0	66 mph WB	(52 mph – 62 mph) 39%	65 mph	None
	72 mph EB	(61 mph – 71 mph) 43%		
MP 29.5	65 mph WB	(52 mph – 62 mph) 46%	55 mph	50 mph EB
(Scenic	69 mph EB	(58 mph – 68 mph) 49%		
Turnout)				
MP 30.0	68 mph WB	(58 mph – 68 mph) 45%	50 mph	50 mph WB
	70 mph EB	(58 mph – 68 mph) 46%		
MP 30.5	59 mph WB	(49 mph – 59 mph) 59%	45 mph	45 mph both
	61 mph EB	(49 mph – 59 mph) 51%		
MP 31.0	69 mph WB	(58 mph – 68 mph) 42%	45 mph	45 mph
	70 mph EB	(58 mph – 68 mph) 46%		
MP 31.5	68 mph WB	(55 mph – 65 mph) 47%	60 mph	50 mph
	66 mph EB	(55 mph – 65 mph) 49%		
MP 32.0	73 mph WB	(64 mph – 74 mph) 44%	60 mph	50 mph WB
	75 mph EB	(61 mph – 71 mph) 45%		
MP 32.5	75 mph WB	(64 mph – 74 mph) 42%	NA	NA
	75 mph EB	(64 mph – 74 mph) 51%		
MP 33.0	75 mph WB	(64 mph – 74 mph) 43%	NA	NA
	76 mph EB	(64 mph – 74 mph) 49%		
MP 33.4	71 mph WB	(61 mph – 71 mph) 52%	NA	NA
(Rimini Road)	76 mph EB	(64 mph – 74 mph) 49%		
MP 34.0	77 mph WB	(67 mph – 77 mph) 51%	NA	NA
	71 mph EB	(61 mph – 71 mph) 51%	1171	1111

For the overall area known as MacDonald Pass from the base of the continental divide on the Elliston side to the intersection with Rimini Road, the statutory 70 mph speed limit is typically at or just below the 85<sup>th</sup> percentile speeds and the upper limit of the pace in both directions.

The only significant variation in traffic operation below the 70 mph speed limit was observed within the segment from milepost 28.0 (Frontier Town access) to milepost 31.5. At five locations the 85<sup>th</sup> percentile speeds and the upper limit of the pace were below the statutory 70 mph speed limit. The lowest speed statistics (59 mph) were recorded at milepost 30.5. However, at both milepost 30.0 and milepost 31.0 the 85<sup>th</sup> percentile speeds and the upper limit of the pace were back in the 68 mph to 70 mph range. These changes in the travel speed profile are directly associated with horizontal and vertical alignment features. This segment is the most restrictive in operational potential as related to speed. The orientation of the spot speed sample and its proximity to a curve also influenced the projected speed profile.

#### **Conclusions and Recommendations**

In evaluating a speed limit for a particular segment of roadway, spot speed samples are used to gather information about the daily operational characteristics during favorable roadway conditions. The 85<sup>th</sup> percentile speed and the pace of the traffic stream and their relationship to special or unique features within the study area are used as the basis in which to arrive at speed limit recommendation. The mountainous terrain in which this segment of US 12 passes through and the resulting design features necessary to traverse this terrain distinguish this segment of US 12 from the surrounding environment and other rural NHS routes. The climatic conditions specific to the study area also contribute to this distinction. These features that distinguish this segment of roadway are also having an influence on traffic operation and the roadway's safety record.

This leads us to a discussion about the 70 mph speed limit and how successful it is in reflecting the 85<sup>th</sup> percentile speeds and the pace of the traffic stream. Overall, with the exception of the area having the most restrictive design features on the east side of pass the 70 mph speed limit is commensurate with daily traffic operation during favorable roadway conditions. The desired travel speeds are in the 70 mph range. During our investigation motorists were successfully traveling at speeds of 70 mph through most of the study area.

There was a reduction in the typical travel speeds identified at five locations within the study area. All five of these variations from the overall trend in the speed profile were located on the east side of the pass in the same proximity of one another. It was also observed that this is the area in which the greatest directional difference in the typical travel speeds was identified and the most conflict as indicated by the accident history. It is our conclusion that the reduction in the travel speeds is associated with the steeper terrain and its influence on both the roadway's horizontal and vertical alignment. There are advance curve warning signs with supplemental advisory speed plates and chevron signs in operation within this segment.

There are three features that stand out within this segment of the study area, Actual Travel Speeds, Roadway Design Features, and Safety Record. In weighing this information with the knowledge that westbound motorists are having greater safety success departing this segment at speeds less than 70 mph, there is logic in using the westbound speed statistics to support a lower speed limit. Based on the travel speeds identified at mileposts 28.0, 29.0, 29.5, 30.5 and 31.5, we can support consideration of reducing the speed limit for the east side of MacDonald Pass. In choosing a 60 mph speed limit recommendation we recognize that it will be below the 85<sup>th</sup> percentile speeds and the upper limit of the

pace at some locations within its boundaries. However, we feel that a 60 mph speed limit is more in line with the true operational and geometric characteristics associated with the terrain and its tendency to draw the travel speeds down below the statutory 70 mph speed limit.

A 60 mph speed limit beginning at station 252+00, project FH 28-1(3), (just east of the Powell County – Lewis & Clark County Line) and continuing east to station 476+00, project RF-FF 249(27), an approximate distance of 4.24 miles.

DCB:DRB:TRF:macpass2

attachments

copies: D.E. Williams

D.R. Bailey



## Montana Department of Transportation PO Box 201001 Helena, MT 59620-1001

#### Memorandum

To: Loran Frazier, P.E. - Chief Engineer

Highways and Engineering Division

From: Duane E. Williams, P.E.

Traffic and Safety Engineer

Date: June 6, 2006

Subject: MT 38 – Skalkaho Road

- □ This investigation is the follow-up to finalize the interim 35 mph and 60 mph speed limits on MT 38 Skalkaho Road (X-route). The investigation began at an intersection with US 93 south of Hamilton and continued east approximately 14.4 miles along Skalkaho Creek and into Bitterroot National Forest. Daily traffic volumes ranged from 2504 at milepost 1.0 to 212 at milepost 12.8. This roadway is paved and consists of two 12-foot travel lanes with 1-foot shoulders in each direction.
- □ There were 20 accidents reported within the study area, 15 of which involved conflicts with deer. The accident rate is 1.42 accidents per million vehicle miles traveled. The statewide average for rural secondary highways is 1.73 accidents per million vehicle miles traveled.
- Based on the travel speeds collected at nine locations the 60 mph interim speed limit is just below the 85<sup>th</sup> percentile speeds and the upper limit of the pace in those areas having the most residential development or where the roadway is the most curvilinear in character. The 35 mph interim speed limit is located in a transitional area, where the travel speeds are influenced by a railroad crossing and the stop condition at the intersection with US 93. The engineering results support finalizing the 35 mph and 60 mph speed limits on MT 38.
- The following recommendations were presented to Ravalli County Commissioners for review and comment. Their comments concurring with the following speed limit recommendation are attached.
- □ A 35 mph speed limit beginning at the intersection with US 93 and continuing south to straight-line diagram station 13+00, an approximate distance of 1,300 feet.

A 60 mph speed limit beginning at straight-line diagram station 13+00 and continuing south and then east to the end of the Departments maintenance jurisdiction at milepost 14.5, an approximate distance of 14.2 miles.

#### Report Submitted to Ravalli County

This investigation is a follow-up to the interim speed limits that were set on MT 38 – Skalkaho Road. MT 38 is an off-system X-route. At the recommendation of the Missoula District office and with the support of Ravalli County Commissioners the Montana Transportation Commission approved an interim 35 mph speed limit from milepost 0.0 to milepost 0.3 and an interim 60 mph speed limit from milepost 0.3 to milepost 14.5.

The portion of MT 38 investigated is under the Department's maintenance jurisdiction. The study area begins at an intersection with US 93 south of Hamilton and continues east along Skalkaho Creek into the Bitterroot National Forest. Daily traffic volumes in July ranged from 2504 at milepost 1.0 to 212 at milepost 12.8 near the end of the study area. This roadway is paved. It's typical section consisting of two 12-foot travel lanes with 1-foot shoulders in each direction. The beginning of the route is primarily straight and flat with the exception of a 90-degree change in the roadway alignment at milepost 0.7. "Advance Curve" warning signs with 40 mph advisory speed plates and chevron signs are in place warning motorists of the change in alignment. As the route continues east towards the Skalkaho Canyon the terrain becomes more rolling in character. This in turn alters the roadway's horizontal and vertical alignment features.

The adjacent side culture along the first 2.5 miles of the route has the most development with nearby residences, business and residential subdivisions that set back from the edge of the roadway. There are numerous intersections with local roads and private approaches within this segment. At milepost 2.5 the number of nearby residences decreases and the roadway takes on a more rural appearance. The amount of vegetation along the roadway increases with fewer open areas. Land parcels along the roadway are also larger with longer distances between approaches and local roads. There is a concentration of approaches between milepost 4.5 and milepost 6.0. At approximate milepost 8.5 MT 38 enters the Bitterroot National Forest and the Skalkaho Canyon. Other features along the route located within the Bitterroot National Forest include a Nature Trail Parking Area and the Black Bear Camp Ground.

#### **Accident History**

The accident history was reviewed for a three-year period from January 1, 2002 to December 31, 2004. During this period there were 20 accidents reported within the study area. Using a weighted average traffic volume gathered in this investigation, the accident rate is 1.42 accidents per million vehicle miles traveled. The statewide average for rural secondary highways is 1.73 accidents per million vehicle miles traveled.

The reported accident experience consisted of 18 single vehicle accidents, one angle accident and one sideswipe accident. Fifteen of the 18 single vehicle accidents involved conflicts with deer. Fourteen of those 15 deer related accidents occurred between milepost 2.5 and milepost 8.6.

#### Travel speeds

Vehicular travel speeds were sampled directionally at nine locations beginning near the intersection with US 93 and continuing east to the end of the study area at milepost 14.2. The following table lists the 85<sup>th</sup> percentile speeds and the pace of the traffic stream by milepost location.

Location	85 <sup>th</sup> percentile Speed	Pace of Traffic Stream & Percent
Int. w/ Grantsdale	Eastbound 52 mph	41 mph – 51 mph (59%)
Cutoff (mp 0.2)	Westbound 58 mph	47 mph – 57 mph (49%)
Near int. w/ Vincent	Eastbound 62 mph	50 mph – 60 mph (53%)
Lane (mp 1.0)	Westbound 65 mph	53 mph – 63 mph (46%)
East of Grantsdale	Eastbound 66 mph	52 mph – 62 mph (40%)
Road (mp 1.4)	Westbound 63 mph	52 mph – 62 mph (48%)
East of Nez Perce	Eastbound 64 mph	52 mph – 62 mph (45%)
Drive (mp 2.0)	Westbound 66 mph	52 mph – 62 mph (38%)
East of Fish Hatchery	Eastbound 65 mph	55 mph – 65 mph (46%)
Road (mp 2.6)	Westbound 67 mph	52 mph – 62 mph (40%)
At S. Shoshone	Eastbound 68 mph	55 mph – 65 mph (39%)
Road (mp 3.7)	Westbound 66 mph	52 mph – 62 mph (41%)
At Milepost 7.6	Eastbound 68 mph Westbound 71 mph	58 mph – 68 mph (51%) 55 mph – 65 mph (39%)
At Milepost 10.5	Eastbound 60 mph Westbound 62 mph	49 mph – 59 mph (52%) 49 mph – 59 mph (51%)
Near Black Bear	Eastbound 65 mph	52 mph – 62 mph (43%)
Campground (mp 13)	Westbound 64 mph	52 mph – 62 mph (41%)

Within the boundaries of the short 35 mph speed zone the speed profile is transitional in character as motorists are either approaching or departing from the intersection with US 93. Along the remainder of the study area the 85<sup>th</sup> percentile speeds were most often around 65 mph. The pace of the traffic stream was typically between 52 mph and 62 mph. There is some variation in both the 85<sup>th</sup> percentile speeds and the pace within the study area. The variation in the travel speeds is associated with changes in the adjacent side culture such as the density and proximity of nearby development and also changes in the roadway alignment. The travel speeds were closer to 60 mph in those areas having the most development and/or a more curvilinear alignment. We did observe a spike in both the 85<sup>th</sup> percentile speeds and the pace near milepost 7.6. The travel speeds at this location are associated with a segment of roadway that is straight and flat and has the least amount of side friction in terms of approaches and nearby development.

#### **Conclusions and Recommendations**

Based on the information gathered in this investigation we recommend action to finalize the 35 mph and 60 mph interim speed limits. The 35 mph speed limit is intended to reflect the change in traffic operation and the transitional nature of the travel speeds associated with the railroad crossing and the intersection with US 93.

The 60 mph interim speed limit is just below the 85<sup>th</sup> percentile speeds and the upper limit of the pace in those areas having the most residential development or where the roadway is the most curvilinear in

character. In other areas where the travel speeds were higher and more supportive of a 65 mph speed limit, the greatest numbers of conflict with deer were reported. The portions of this route that are operating at or below 60 mph are functioning more successfully than those having the higher travel speeds. Therefore, it is our conclusion that the 60 mph speed limit is more appropriate for study area as a whole.

In an effort to promote additional uniformity in the speed profile within the corridor and in response to concerned citizens we recommend the installation of additional 60 mph speed limit signs along the central portion of the study area. A 60 mph speed limit sign will also need to be installed at straight-line diagram station 13+00, the east side of the intersection with White Birch Lane for the 35 mph to 60 mph speed limit transition. The following is a description of the speed limit configuration that will be presented to the Montana Transportation Commission for final approval.

A 35 mph speed limit beginning at the intersection with US 93 and continuing south to straight-line diagram station 13+00, an approximate distance of 1,300 feet.

A 60 mph speed limit beginning at straight-line diagram station 13+00 and continuing south and then east to the end of the Departments maintenance jurisdiction at milepost 14.5, an approximate distance of 14.2 miles.

In addition to the speed limit signs we also recommend the installation of "Deer Crossing" warning signs with "Next 6 Miles" supplemental distance plaques at milepost 2.5 for eastbound traffic and milepost 8.6 for westbound traffic.

DCB:DRB:TRF:skalkahord.rpt

attachments

copies: D.E. Williams

D.R. Bailey

Staff person handling: Tim Reardon, Chief Counsel

Date/location: June 29, 2006 in Red Lodge, MT

Item: Adoption Notice for Outdoor Advertising Rules

### Background

At their May 25, 2006 meeting, the Transportation Commission approved all but one of the proposed new rules and amendments to existing rules.

The commission needs to review a final adoption notice and if approved, have the chairman sign it. The Adoption Notice is then filed with the Secretary of State to be published in the Montana Administrative Register to make the rules changes effective.

#### Staff recommendations

Staff recommends the commission approve and sign the Adoption Notice.

Notes/discussion

Staff person handling: Loran Frazier, Chief Engineer

Date/location: June 29, 2006 in Red Lodge, MT

Item: Amended Access Control Resolution

F 23-1(5)1, 0109-005-000, Main St. & Haynes Ave.-Miles City

### Background

MDT has received an application for a new approach onto Haynes Avenue in Miles City, Montana. This particular portion of Haynes Avenue was included in Highway Project F 23-1(5)1 and, as part of that project, the Transportation Commission executed a resolution designating this portion of Haynes Avenue as an Access Controlled Highway and Facility. In 1996, the Transportation Commission amended the original resolution and said resolution limited the number of approaches along this portion of Haynes Avenue to seven approaches. In order for MDT to allow the requested approach, it is necessary for the Transportation Commission to amend the resolution to allow eight approaches.

### **Summary**

REQUEST – Amend Access Control Resolution to allow a new private approach on Highway Project F 23-1(5)1 at station 47+90 Left.

PERSON REQUESTING APPROACH - Roger Lothspeich

PROPOSED USE OF APPROACH – Provide access to new commercial activity.

REASON FOR REQUEST – Mr. Lothspeich recently acquired the property in question and plans to develop a commercial business. Mr. Lothspeich considers an approach onto Haynes Avenue as critical for the success of his business.

LOCATION – The property is located on Haynes Avenue just north of the Interstate 94 Interchange at Haynes Avenue.

HISTORY OF PARCEL – The property owned by Mr. Lothspeich was a portion of Parcel 15 on Project F 23-1(5)1. This parcel consisted of multiple tracts of land with two separate tracts fronting on Haynes Avenue. MDT acquired access control from this parcel and allowed one approach at station 49+50 Left for the use of both tracts. Although both tracts were intended to use the approach, the approach is located entirely on one of the tracts and Mr. Lothspeich does not own the tract that the approach is on. There is no easement providing Mr. Lothspeich with access to the approach. Mr. Lothspeich acquired the property with the belief that access to Haynes Avenue could be obtained.

SIGHT DISTANCE – The alignment is straight and level, and sight distance exceeds that which is required in both directions.

ADJACENT APPROACHES – There are no anticipated conflicts with the adjacent approaches if this approach is allowed.

ACCIDENT HISTORY – There is no accident history for the access point, as this is a new access request.

MEPA/NEPA DOCUMENT – Mr. Lothspeich has submitted the required environmental checklist and it is being reviewed by MDT. Initial review of the checklist indicates that there are no environmental issues to be concerned with. If any concerns are raised in the final review, the approach will not be granted until they are resolved.

OPPOSITION – There is no known opposition to this approach request at this time.

FAIR MARKET VALUE – An appraisal is being completed by MDT District staff and the parcel owner will be required to pay to MDT the value as determined by the appraisal. The approach will not be granted until the appraisal is approved and MDT has received the required compensation.

PORTION OF RESOLUTION TO BE AMENDED – The current resolution allows seven (7) private approaches on the left side of Haynes Avenue between station 19+50 and station 50+40 and there are already seven approaches currently in existence. In order for MDT to allow a new approach, the resolution must be amended to allow eight private approaches.

EXHIBITS – The following exhibits are attached for Commission information and review:

Exhibit I: An overall map of the area, showing the location of the access request in relation to the Interstate 94 Interchange.

Exhibit II: A detail showing the property requesting the additional access point.

DISTRICT REVIEW – The Glendive District office has reviewed the request, and has determined that this additional approach will not adversely impact the roadway system in this area. They recommend that the approach be allowed.

#### Staff recommendations

Staff recommends that the Commission execute the Amended Resolution and thereby increase to eight the number of at-grade private approaches allowed on the left side of Haynes Avenue between Stations 19+50 and 50+40.

### Notes/discussion

Staff person handling: Jim Lynch, Director

Date/location: June 29, 2006 in Red Lodge, MT

Item: Delegation requesting special road name

Connie O'Connor and family

## **Background**

Please see attached letter from Mildred Ewing.

### **Summary**

In accordance with past practice, MDT may make and install the signs, then assume the responsibility and associated costs for long-term maintenance. Past practice of the commission has required the requesting entity to arrange to pay for manufacturing the signs.

A map showing all specifically designated or named routes in the state is attached.

Notes/discussion

Staff person handling: Jim Lynch, Director

Date/location: June 29, 2006 in Red Lodge, MT

Item: Shiloh Road

Notes/discussion

Staff person handling: Loran Frazier, Chief Engineer

Date/location: June 29, 2006 in Red Lodge, MT

Item: Letting lists

## Background

Staff will distribute the most current lists of upcoming projects slated for advertisement and bid letting.

### Staff recommendations

Staff recommends approval of the letting lists.

Notes/discussion

Staff person handling: Loran Frazier, Chief Engineer

Date/location: June 29 in Red Lodge, MT

Item: Certificates of completion

## Background

Attached are certificates of completion for April and May 2006.

## **Summary**

Month	Original contract amount	Final payment amount
	(monthly total)	(monthly total)
April 2006	\$14,671,297	\$15,083,125
May 2006	\$16,469,752	\$14,621,250
Total	\$31,141,049	\$29,704,375

## Staff recommendation

Staff recommends approval.

Notes/discussion

Staff person handling: Loran Frazier, Chief Engineer

Date/location: June 29, 2006 in Red Lodge, MT

Item: Project change orders

## Background

Attached are project change orders for April and May 2006.

**Summary** 

Month	Total
April 2006	\$512,990.11
May 2006	\$271,066.12
	\$784,056.23

## Staff recommendation

Staff recommends approval.

Notes/discussion

Staff person handling: Jim Lynch, Director

Date/location: June 29, 2006 in Red Lodge, MT

Item: Commission discussion

Staff person handling: Jim Lynch, Director

Date/location: June 29, 2006 in Red Lodge, MT

Item: Public comment

Staff person handling: Jim Lynch, Director

Date/location: June 29, 2006 in Red Lodge, MT

Item: Upcoming commission meetings

The commission is scheduled to convene via conference call on July 31, 2006 to take action on projects in the July 20 bid letting.

The commission will visit district two on August 2 and 3. The commission meeting will begin at 8:30 am on August 3 at the Community Center, 118 E 7<sup>th</sup> Street in Anaconda. August 2 accommodations have been reserved at the Marcus Daly motel, 119 West Park.